1. **Adruino code for DHT11**

**Principle:** Send data to PC/ Raspberry Pi via USB port.

**Source:** D:\projects\ARDUINO\DHT11

**Describe:**

1. **Arduino code for Ultrasonic sensor**

**Principle**: Send data to PC/ Raspberry Pi via USB port.

**Source:** D:\projects\ARDUINO\ultrasonic sensor hy srf05

**Describe:**

**Code:**

#define SONAR\_TRIGGER\_PIN 2

#define SONAR\_ECHO\_PIN 3

int current\_distance=0;

unsigned int measure\_distance()

{

// Trigger the SRF05:

digitalWrite(SONAR\_TRIGGER\_PIN, HIGH);

delayMicroseconds(10);

digitalWrite(SONAR\_TRIGGER\_PIN, LOW);

// Wait for Echo Pulse

unsigned long pulse\_length = pulseIn(SONAR\_ECHO\_PIN, HIGH);

// Ensure the ultrasonic "beep" has faded away

delay(50);

// Convert Pulse to Distance (inches)

// pulse\_length/58 = cm or pulse\_length/148 = inches

return( (unsigned int) (pulse\_length / 58) );

}

void setup()

{

pinMode(SONAR\_TRIGGER\_PIN, OUTPUT);

pinMode(SONAR\_ECHO\_PIN, INPUT);

Serial.begin(9600);

}

void loop()

{

if(Serial.available()>0){

int incomingbyte=Serial.read();

current\_distance = measure\_distance();

//Serial.println(current\_distance);

String json=buildJson();

char jsonStr[200];

json.toCharArray(jsonStr,200);

Serial.println(jsonStr);

delay(500);

}

}

String buildJson() {

String data = "{";

// data+="\n";

// data+= "\"d\": {";

// data+="\n";

data+="\"ID\": \"Arduino Ultrasoud\",";

// data+="\n";

data+="\"Water\_level\": ";

data+=(int)current\_distance;

//data+= ",";

//data+="\n";

data+="}";

//data+="}";

return data;

}